

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark  
Office  
(Box PCT)  
Crystal Plaza 2  
Washington, DC 20231  
ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

Date of mailing (day/month/year)

25 November 1998 (25.11.98)

International application No.

PCT/CZ98/00019

Applicant's or agent's file reference

PV/232/PCT

International filing date (day/month/year)

27 April 1998 (27.04.98)

Priority date (day/month/year)

30 April 1997 (30.04.97)

Applicant

KASAFÍREK, Evzen et al

1. The designated Office is hereby notified of its election made:



in the demand filed with the International Preliminary Examining Authority on:

23 October 1998 (23.10.98)



in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Kari Huynh-Khuong

Telephone No.: (41-22) 338.83.38

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

19

REC'D	11 FEB 1999
WIPO	PCT

Applicant's or agent's file reference PV/232/PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (PCT/IPEA/416)	
International application No. PCT/CZ98/00019	International filing date (day/month/year) 27/04/1998	Priority date (day/month/year) 30/04/1997
International Patent Classification (IPC) or national classification and IPC C07K14/81		
Applicant VUFB, a.s. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 5 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of    sheets.

3. This report contains indications relating to the following items:

- I    ☒ Basis of the report
- II   ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V   ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  23/10/1998	Date of completion of this report
Name and mailing address of the IPEA/   European Patent Office D-80298 Munich Tel. (+49-89) 2399-0, Tx: 523656 epmu d Fax: (+49-89) 2399-4465	Authorized officer  Moonen, P  Telephone No. (+49-89) 2399-8538



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/CZ98/00019

**I. Basis of the report**

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

**Description, pages:**

1-12 as originally filed

**Claims, No.:**

1-4 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims	1-4
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-4
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-4
	No:	Claims	

**INTERNATIONAL PRELIMINARY  
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**2. Citations and explanations**

**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/CZ98/00019

Reference is made to the following documents:

D1: WO 90 04409

D2: US-A-4528133

D3: Biol Chem Hoppe Seyler **366** (1985) 333-343

**Re Item V**

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- i. On the basis of the available documents D1-D3 it is concluded that the present application satisfies the criterion set forth in Article 33(2) PCT because the subject-matter of said claims is new in respect of prior art as defined in the regulations (Rule 64(1)(3) PCT).
- ii. In addition, the present application satisfies the criterion set forth in Article 33(3) PCT because the subject-matter of said claims involves an inventive step (Rule 65(1)(2) PCT).

The closest state of the art document is considered to be D1: it refers to a synthetic peptide inhibitors of elastase with a sequence Lys-Ala-Pro but with additional other groups attached. D2 or D3 in combination with D3 would suggest the presently claimed inhibitors of claim 1 characterized by the sequence Lys-Ala-Ala-Pro with the additional groups at the N-terminus and the isobutyl at the C-terminus., and the demonstrated high inhibitory activity (see Table VII of the application).

The method claims 2-4 only refer to the synthesis of the inhibitors of claim 1 with the general structure I and are therefore also considered to be inventive.

**Re Item VII**

Certain defects in the international application

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D3 are not mentioned in the description, nor are

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/CZ98/00019

these documents identified therein.

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# INTERNATIONAL SEARCH REPORT

National Application No

PCT/CZ 98/00019

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C07K14/81 C07K5/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 528 133 A (KASAFIREK EVZEN ET AL) 9 July 1985 see page 4 see table I see example 8	2-4
A	KASAFIREK ET AL.: "Anionic inhibitor of pancreatic and leukocyte elastase" BIOL. CHEM. HOPPE-SEYLER, vol. 366, 1985, pages 333-343, XP002074780 see the whole document	
A	WO 90 04409 A (UNIV KENTUCKY RES FOUND) 3 May 1990 see claims	

☐

Further documents are listed in the continuation of box C.

☒

Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

18 August 1998

Date of mailing of the international search report

01/09/1998

Name and mailing address of the ISA

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Authorized officer

Cervigni, S

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CZ 98/00019

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4528133 A	09-07-1985	CS 231228 B	15-10-1984
		AT 387781 B	10-03-1989
		BE 897844 A	16-01-1984
		CA 1243306 A	18-10-1988
		CH 658251 A	31-10-1986
		DE 3335865 A	05-04-1984
		FR 2533920 A	06-04-1984
		GB 2127830 A,B	18-04-1984
		JP 1696171 C	28-09-1992
		JP 3059919 B	12-09-1991
		JP 59078150 A	04-05-1984
		SE 457087 B	28-11-1988
		SE 8305123 A	02-04-1984
WO 9004409 A	03-05-1990	US 5008245 A	16-04-1991
		AU 629259 B	01-10-1992
		AU 4511089 A	14-05-1990
		CA 2001629 A	27-04-1990
		EP 0367514 A	09-05-1990
		EP 0396709 A	14-11-1990
		JP 3503055 T	11-07-1991